



# TRANSPORTING INNOVATIONS

**First Edition**

**March, 2011**

## Continuous Improvement Culture at NCDOT

### **“CONTINUOUS IMPROVEMENT”:**

By Margaret Anderson

What is “continuous improvement”? It can be defined as “an organizational attitude, approach and philosophy to doing business”. Employees at all levels of an organization should be empowered to analyze new and/or improved techniques and methods of operations, evaluate customer requirements (both internal and external customers), identify opportunities for improvements, implement changes, and track the impact of these changes. Continuous improvement is a commitment to seek out opportunities to deliver better products and services.

Continuous improvement is a cultural shift—not a project with a deadline or an initiative for one area of business. It requires an entire team, everybody

in the organization, to focus on driving improvements.

Can a continuous improvement culture work within NCDOT? Of course, it already does! NCDOT employees have been creative and innovative in seeking opportunities to save money, to enhance the environment, to improve safety, and to serve our customers.

Do you have your own idea for improvement? Well, put it to work so it can generate some benefit for you, your team, your organization! The time for innovation is now, and all NCDOT employees can make it happen!

“Accountability breeds response-ability.”

Stephen R. Covey

*The purpose of this new newsletter is to highlight current and past innovative ideas and techniques NCDOT employees have suggested and/or implemented.*

**Organization**

Continuous Improvement Team  
NCDOT—Quality Enhancement Unit

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## Improvements to the CPI Program in the works!

The Continuous Improvement Team in the Quality Enhancement Unit is updating the CPI Program to embrace the continuous improvement culture change within NCDOT and to maintain communication that is relevant, timely and interesting. Com-

munication efforts include a revised CPI website that provides links to the following:

- 1) A new CPI project application form,
- 2) Process improvement database that includes past CPI projects.

- 3) Recent innovations database for current project submissions.

Check out the new, improved CPI website:

<http://www.ncdot.org/programs/cpi>

**NEWSLETTER DEDICATED TO  
INNOVATION AND CONTINUOUS  
IMPROVEMENT**

*Transporting Innovations*

# Employee in Division 5 Designs Equipment Trailer Safety Step

## Equipment Trailer Safety Step (Division 5, Equipment)

NCDOT utilizes 699 equipment trailers of at least five different models. Each trailer may have a factory-installed step which costs, on average, \$350 per step. These steps are often welded to the trailer tongue which is an inaccessible location when equipment is loaded. Employee complaints and accident reports were an issue.

A continuous improvement team (Adrian Rigsbee, Gary Roberts, Larry Lewis) in Division 5 came up with a solution. One of the team members, Adrian Rigsbee,

designed a step which not only can be installed in any location on any model of equipment trailer, but costs only \$45.00 per step installed. This safety step is installed using a carriage bolt through the wooden deck board of the trailer and thus is easily repositioned as required. The team created twenty-one steps. The use of this safe and versatile step for the 699 trailers in service can save up to \$213,195 in parts and labor.

For more information, contact Adrian Rigsbee at (919) 477-2128. (aarigsbee@ncdot.gov)



"Design is so critical it should be on the agenda of every meeting in every single department."

Tom Peters

## Dollar Savings - D2 Attenuator Upgrade

Within the Roadside Environmental Pesticide program in Division 2, water supply and traffic control are two challenges. They sent out advance warning vehicles and most of the time an attenuator. Sometimes, an additional water truck with a 1000-gallon or larger water tank was sent out.

A continuous improvement team, including John Wells, Buddy Dixon, Vann Sparrow,

The approximate \$2,500.00 cost of placing the tank on the attenuator is easily offset by the \$281.60 daily savings (based on an 8-hour day) of not having to operate an additional truck on this task.

Greg Rayburn, Lewis Baker, Rocco Gentile, Meredith Taylor and Brian Lee Dixon, found a solution. The equipment shop removed the existing ballast from the attenuator truck and installed a 1,000-gallon tank along with enough weight to keep the truck within minimum guidelines when the tank is empty. Meredith Taylor of the Greenville Equipment shop designed a tank from steel that

held 1,500-gallons and was heavy enough that no additional ballast was needed. The 1,500 unit is much more effective.

By not having to operate an additional truck, there is a \$281.60 daily savings (based on an 8-hour day).



## Encouraging Innovative Thought in the Workplace?

Innovation is generally about small improvements, not a lightening bolt out of the sky or a technically sophisticated gadget. Innovative opportunities are all around us, we just have to look for them. These opportunities are not just limited only to top management—each of us is the most qualified person at what we do to find ways to improve and be innovative.

While on the job, look for opportunities to innovate and/or improve. Tie innovative ideas to the five goals of NCDOT:

1. Safer transportation network.
2. Move people and goods efficiently.
3. Infrastructure that lasts longer.
4. NCDOT—a place that works well.

5. NCDOT—a great place to work.

Every business unit within NCDOT should support a culture of continuous improvement and innovation. Employees are willing to contribute ideas if the proper climate exists (e.g., "ALL ideas are welcome.") Hold monthly team meetings to brainstorm new ideas.